CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 83-46

NPDES PERMIT NO. CA0038121

WASTE DISCHARGE REQUIREMENTS FOR:

TOWN OF YOUNTVILLE AND VETERANS
HOME, DEPARTMENT OF VETERANS AFFAIRS,
STATE OF CALIFORNIA
NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The Town of Yountville and Veterans Home, Department of Veterans Affairs, State of California, (hereinafter called the dischargers) submitted a report of waste discharge dated July 1, 1983, and a consultant's report dated June 10, 1983, for reissuance of NPDES No. CA0038121.

2. The dischargers presently discharge 0.36 million gallons per day (mgd) average flow (dry weather) from their tertiary treatment plant which has a dry weather capacity of 0.55 mgd. This plant treats domestic wastewater from the Town and the Veterans Home. The treated wastewater is discharged into the Napa River, a water of the State and the United States, during the wet weather period of October 1 through May 15 through two outfall pipes submerged in the river. These outfalls consist of an 18 inch pipe located at 38° 24' 24" N latitude, 122° 20' 27" W longitude, and a 6 inch outlet on the reclaimed water wastewater pipeline at 38° 23' 53" N latitude, 122° 20' 31" W longitude. During the dry weather season all wastewater is treated and reclaimed. The dry weather reclamation is covered by a different set of waste discharge requirements adopted by the Board in Order No. 78-79.

3. The wet weather discharge is presently governed by Order No. 78-74, Waste Discharge Requirements, which allow the discharge to the Napa River.

4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for the Napa River.

5. The beneficial uses of the Napa River downstream from the point of discharge are:

   a. Agricultural water supply for stock watering, irrigation and frost protection.

b. Water contact recreation.

c. Fish migration and habitat

d. Preservation and enhancement of fish, wildlife and other aquatic resources.

e. Esthetic enjoyment.

6. The Basin Plan prohibits discharge of wastewater which has characteristics of concern to beneficial uses into any nontidal water. An exception can be considered for wet weather and other discharges having a high initial dilution where the discharge is approved as a part of a reclamation project.

7. The Board finds that the Napa River is a nontidal water at Yountville, but the discharge, under the requirements of this order, complies with the qualification in Finding 6 for considering an exception to the prohibition against discharge to nontidal water and the Board allows the discharge.

8. As an NPDES Permit reissuance, this project is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

9. The dischargers and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendtions.

10. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that the dischargers, in order to meet the provisions contained in Division 7 of the California Water Code and the regulations adopted thereunder and the provisions of the Clean Water Act, and the regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Bypass or overflow of untreated wastewater to waters of the State or the United States, either at the treatment plant or from the collection system is prohibited.

2. The average dry weather flow shall not exceed 0.55 mgd. This shall be determined by the average of three consecutive dry weather months.

3. Discharge at any point at which the wastewater does not receive a dilution of at least 10:1 (river to wastewater effluent flow) is prohibited.

4. The discharge to the Napa River is prohibited during the period from May 16th through September 30th of each year. The Executive Officer may authorize discharge to the river for a specified period beyond May 15 based on a written request from the dischargers documenting abnormally high rainfall and resultant lack of demand for reclaimed water.

B. Effluent Limitations

The discharge of effluent shall meet one of the following sets of limitations based upon the river to wastewater dilutions as specified:

1. For a river to wastewater dilution of at least 10:1 but less than 50:1:

	Constituent	Unit	30-Day Average	Daily Maximum	Instantaneous Maximum
a.	Settleable Matter	ml/l-hr	0.1		0.2
b.	BOD	mg/l	10	20	
c.	Suspended Solids	mg/l	15	30	
d.	Grease & Oil	mg/l	5	10	
e.	Turbidity	TU		10 for at least 95% of the time for a 24-hr period	
f.	Chlorine Residual	mg/l			0.0
g.	Total Coliform Organisms	MPN/ 100ml	At some point in the treatment process, 2.2 MPN/100 ml., median of the last seven days for which analyses have been completed		

2. For a river to wastewater dilution of at least 50:1:

	Constituent	Unit	30-Day Average	7-Day Average	Daily Maximum	Instantaneous Maximum
a.	Settleable Matter	ml/l-hr	0.1	-	-	0.2
b.	BOD	mg/l	30	45	60	-
c.	Suspended Solids	mg/l	30	45	60	-

d.	Grease & Oil	mg/l	10	-	20	-
e.	Chlorine Residual	mg/l		-	-	0.0
f.	Total Coliform Organisms	MPN/ 100ml	At some point in the treatment process, 23 MPN/100 ml, median of the last seven days for which analyses have been completed			

3. Each discharge shall not have a pH less than 6.5 nor greater than 8.5.

4. In any representative set of samples the waste as discharged at either location shall meet the following limit for toxicity: the survival of test organisms acceptable to the Board in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

5. The arithmetic mean of the values for BOD and Suspended Solids effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of respective values for influent samples collected at approximately the same times, during the same period. (85 percent removal)

6. Representative samples of either effluent discharge shall not exceed the following limits by more than the percentage of time indicated:

Constituent	Unit of Measurement	50% of time	10% of time
Arsenic	mg/l	0.01	0.02
Cadmium	mg/l	0.02	0.03
Total Chromium	mg/l	0.005	0.01
Copper	mg/l	0.2	0.3
Lead	mg/l	0.1	0.2
Mercury	mg/l	0.001	0.002
Nickel	mg/l	0.1	0.2
Silver	mg/l	0.02	0.04
Zinc	mg/l	0.3	0.5
Cyanide	mg/l	0.1	0.2
Phenolic Compounds	mg/l	0.5	1.0
Total Identifiable Chlorinated Hydrocarbons (a)	mg/l	0.002	0.004

(a) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyles, and other identifiable chlorinated hydrocarbons.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State or United States at any place:

   a. Floating, suspended, or deposited macrascopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in water of the State or United States at any place:

a.	Dissolved oxygen	7.0 mg/l minimum. Median of any three consecutive months - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentation of dissolved oxygen.
b.	Dissolved sulfide	0.1 mg/l maximum
c.	pH	Variation from natural ambient pH by more that 0.5 units
d.	Nutrients	50 ug chlorophyll a/l, maximum
e.	Un-ionized ammonia as N	0.025 mg/l, annual median 0.4 mg/l, maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersedes the requirements prescribed by Order No. 78-74, which is hereby rescinded.

2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

   Mass Emission Limit in lbs/day = Concentration limit in mg/l x 8.34 x Actual Flow in mgd Averaged Over The Time Interval to which the Limit Applies.

3. The dischargers shall comply with all sections of this Order immediately upon adoption.

4. The dischargers shall comply with the self-monitoring program as adopted by this Board and as may be amended by the Executive Officer.

5. The dischargers shall comply with all items of the attached "Standard Provisions, Reporting Requirements and definitions," dated April 1977.

6. The dischargers shall review and update annually their contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

7. This Order expires November 16, 1988. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

8. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the Permit shall not become effective until such objection is withdrawn.

9. In reviewing compliance with Effluent Limitation B.5., the Board will take special note of the difficulties encountered in achieving compliance during periods of high wet weather flows.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 16, 1983.

ROGER B. JAMES
Executive Officer

Attachments:
Standard Provisions, Reporting Requirements, and Definitions, dated April 1977
Self Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

F I N A L

SELF-MONITORING PROGRAM
FOR

TOWN OF YOUNTVILLE AND VETERANS HOME,

DEPARTMENT OF VETERANS AFFAIRS,

STATE OF CALIFORNIA

NPDES NO. CA0038121

ORDER NO. 83-46

CONSISTS OF

PART A, dated 1/78

AND

PART B

PART B - TOWN OF YOUNTVILLE AND VETERANS HOME, DEPARTMENT OF VETERANS AFFAIRS, STATE OF CALIFORNIA

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Station	Description
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment.

B. EFFLUENT

Station	Description
E-001	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present. (May be the same as E-001-D).
E-001-D	At any point in the disinfection facilities for Waste E-001 at which point adequate contact with the disinfectant is assured.

C. RECEIVING WATERS

Station	Description
C-1	At a point in the Napa River, located approximately 500 feet upstream from the point of discharge.
C-2(D)	At a point in the Napa River, located at the point of discharge.
C-3	At a point in the Napa River, located approximately 100 feet downstream from the point of discharge.
C-4	At a point in the Napa River, located approximately 1000 feet downstream from the point of discharge.

D. LAND OBSERVATIONS

Station	Description
P-1 thru P-'n'	Located at the corners and mid-points of the periphery boundary of the waste treatment and disposal facilities site. (A sketch showing the locations of these stations will accompany the first report).

L-1 through L-'n'	Located along the perimeter levee of each sludge lagoon at equidistant intervals not to exceed 100 feet. (A sketch showing the locations of these stations will accompany the first report).

E. GROUNDWATER

Station	Description
G-1 thru G-3	These groundwater monitoring wells shall be located above and below gradient of the sludge lagoons as shown on the attached map. The depth of the wells shall be as deep as necessary to reach the average dry weather month's water table. The groundwater wells shall be constructed per County Health Department well standards. A well drilling log shall be submitted for each sampling well established per this monitoring program.

F. OVERFLOWS AND BYPASSES

Station	Description
OV-1 thru OV-'n'	Bypass or overflows from manholes, pump stations or collection system. Note: Initial SMP report to include map and description of each known bypass or overflow location. Reporting - Shall be submitted monthly and include date, time and period of each overflow or bypass.

II. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

A. This self-monitoring program is applicable when wastewater is discharged to the Napa River.

B. The schedule of sampling, analysis and observations shall be that given in Table I.

C. Groundwater sampling, as described in paragraph I.E. and Table I, shall become applicable upon completion of construction of proposed sludge lagoons.

III. MODIFICATION OF PART 'A', DATED 1/78

Exclusions: Paragraphs C-3, C-4 and F-3e.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 83-46

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Effective Date_____

Attachments:
Table I (2 pages)
Notes for Table I
Map

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A	E-001			E-001-D		All C Sta.	All P Sta.	All OV Sta.	All L Sta.	All G Sta.		
TYPE OF SAMPLE	C-24	G	C-24	Cont	G	C-24	G	O	O	O	G		
Flow Rate (mgd)	D			D									
BOD, 5-day, 20°C, or COD (mg/l)	W		W										
Chlorine Residual & Dosage (mg/l)					2H or cont								
Settleable Matter (ml/l-hr.)		D											
Total Suspended Matter (mg/l)	W		W										
Oil and Grease (mg/l)			(2) 3M										
Coliform (Total) (MPN/100 ml) per req't					2/W								
Fish Tox'y 96-hr. % Surv'l in undiluted waste						(4) 3M							
Ammonia Nitrogen (mg/l)			3M										
Nitrate Nitrogen (mg/l)			3M								(3) 2/Y		
Nitrite Nitrogen (mg/l)			3M										
Total Organic Nitrogen (mg/l)			3M										
Total Phosphate (mg/l)			3M										
Turbidity (Jackson Turbidity Units)			cont				M						
pH (units)		D					M						
Dissolved Oxygen (mg/l and % Saturation)		M					M						
Temperature (°C)		D					M						
Color (described and compare with upstream river color)							M						
Sulfides (if DO<5.0 mg/l) Total & Dissolved (mg/l)		M					M						
Arsenic (mg/l)			Y										
Cadmium (mg/l)			Y										
Chromium, Total (mg/l)			Y										
Copper (mg/l)			Y										
Cyanide (mg/l)			Y										
Silver (mg/l)			Y										
Lead (mg/l)			Y										

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A	E-001			E-001-D		All C Sta.	All P Sta.	All OV Sta.	All L Sta.	All G Sta.		
TYPE OF SAMPLE	C-24	G	C-24	Cont	G	C-24	G	O	O	O	G		
Mercury (mg/l)			Y										
Nickel (mg/l)			Y										
Zinc (mg/l)			Y										
Phenolic Compounds (mg/l & kg/day)			Y										
All Applicable Standard Observsations		D					M	W	E	W			
Total Ident. Chlor. Hydro-carbons (mg/l)			Y										
Nutrients (ug/l chlorophyll a)							M						
Unionized ammonia as N (mg/l)							M						
River flow rate (cfs)							W						
Volumetric dilution in (River flow to wastewater discharge rate)		W					W						
TOC (mg/l)											(3) 2/Y		

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
Cont = continuous sampling
O = observation

TYPES OF STATIONS

A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
OV = overflows and bypasses
G = groundwaters stations

FREQUENCY OF SAMPLING

E = each occurence
D = once each day
W = once each week
M = once each month
Y = once each year

4/W = 4days per week
2/W = 2 days per week
2/Y = 2 per year, once in January, once in July

2H = every 2 hours
3M = every 3 months
Cont = continuous

NOTES FOR TABLE I

(1) During any day when bypassing occurs from any treatment phase(s) (Primary, Secondary, Chlorination, and Dechlorination) in the plant, the monitoring program for the effluent shall include the following in addition to the above schedule for sampling, measurement and analyses:

1. When bypassing occurs from any primary or secondary treatment unit(s), composite sample for BOD, total suspended solids, oil and grease (influent and effluent), grab sample for settleable matter, and continuous monitnring of flow.

2. When bypassing chlorination treatment, grab sample for Coliform (Total and Fecal), and continuous monitoring of flow.

3. When bypassing dechlorination treatment, grab sample for chlorine residual (continuous or every two hours), and continuous monitoring of flow.

(2) Oil and grease sampling shall consist of 3 grab samples taken at equal intervals during the sampling day, with each grab being collected in a glass container and analyzed separately. Results shall be expressed as a weighted average of the 3 values, based upon the instantaneous flow rates at the time each grab sample was analyzed.

(3) Prior to taking the groundwater samples, each well shall be pumped a minimum of five minutes. In addition, depth of each well (feet), depth to water (feet), and depth of sample (feet) shall be reported.

(4) Toxicity sampling shall occur once in October, once in January, and once in April.